

IN THE SPECIFICATION:

Please amend the specification as follows.

Please amend the paragraph beginning on page 1, line 5, as follows.

-- The present invention relates to a method of creating a shell element analytical model for two dimensional analysis from a three dimensional solid analytical model by a finite element method on the basis of three dimensional geometric data designed by three dimensional computer-aided design (CAD). --

Please amend the paragraph beginning on page 1, line 22, and ending on page 2, line 12, as follows.

-- However, if thin walled structures or exterior components are to be analyzed by using three dimensional solid analytical models, as in, e.g., plastic injection molding computer-aided engineering (CAE) (filling/packing/cooling/warp analysis program), the temperature distribution in the direction of plate thickness must be accurately calculated. To do this, element division in the direction of plate thickness in about five to 10 layers is necessary. At this time, the total number of elements of analytical models is more than 5,000,000. It is not practical in terms of calculation cost from the viewpoint of current computing capability. In many cases, therefore, a neutral plane is created manually from a three dimensional solid model. Calculation is performed by using an analytical model obtained by dividing the neutral plane by triangular or rectangular two dimensional shell elements. --

Please amend the paragraph beginning on page 2, line 18, as follows.

-- Two dimensional neutral plane surface data is manually generated for two planes that constitute the plane thickness of geometric data from three dimensional solid CAD data. A neutral plane can be generated by using a CAD/CAE tool represented by, e.g., IDEAS™, PATRAN™, and FEMAP™. There also exists a method of generating a two dimensional shell element model for the neutral plane shape. --

Please amend the paragraph beginning on page 6, line 23, and ending on page 7, line 2, as follows.

-- Fig. 16 is a view showing divided elements obtained by automatically dividing the three dimensional CAD geometric data into tetrahedral elements by using a preprocessor function for finite element analysis of IDEAS™ so as to form a single layered structure in the direction of plate thickness; and --.

Please amend the paragraph beginning on page 8, line 16, as follows.

-- First, as shown in step S1 in Fig. 1, assume that an object shape is designed by three dimensional CAD so that three dimensional CAD geometric data is available. Processing starts from a state wherein the three dimensional geometric data is loaded by a preprocessor such as IDEAS™ available from EDS PLM solutions or PATRAN™ available from MSC, which is used for finite element analysis and is capable of tetrahedral element division.

Please amend the paragraph beginning on page 13, line 7, as follows.

-- First, as shown in step S10 in Fig. 13, assume that an object shape is designed by three dimensional CAD so that three dimensional CAD geometric data is available. As described above, processing starts from a state wherein the three dimensional geometric data is loaded by a preprocessor such as IDEAS™ available from EDS PLM solutions or PATRAN™ available from MSC, which is used for finite element analysis and is capable of tetrahedral element division. --

Please amend the paragraph beginning on page 17, line 10, as follows.

-- Figs. 14 and 15 show the three dimensional CAD geometric data of a component of a fixing toner container used in a laser beam printer (LBP), which is designed by IDEAS™. The basic plate thickness of this component is 2.5 mm. The component has a complex rib shape. --

Please amend the paragraph beginning on page 17, line 16, as follows.

-- Fig. 16 is a view showing divided elements obtained by automatically dividing the three dimensional CAD geometric data into tetrahedral elements by using a preprocessor function for finite element analysis of IDEAS™ so as to form a single layered structure in the direction of plate thickness. This view of divided elements is output to a universal file (text data) as the intermediate format file of IDEAS™.--